

What is claimed is:

1. A synchronous signal generator converting output which is a sine wave from a crystal oscillator of an
5 oscillation frequency f into a pulse of a rectangular waveform by a pulse converter, wherein

output which is a sine wave from the crystal oscillator is passed through a filter equal to the oscillation frequency f in center frequency f_0 , and is
10 input into the pulse converter.

2. The synchronous signal generator according to claim 1, wherein

15 said filter is a crystal filter equal to the crystal oscillator in frequency-temperature characteristic.

3. The synchronous signal generator according to claim 2, wherein

20 respective crystal pieces used for the crystal oscillator and the crystal filter have an equal cutting angle.

4. The synchronous signal generator according to
25 claim 1, wherein

said oscillation frequency f is equal to a frequency of a fundamental wave component output from the crystal oscillator.

5 5. The synchronous signal generator according to claim 1, wherein

 said pulse converter is a complementary output driver IC.

10 6. A synchronous signal generator, comprising:

 a crystal oscillator unit oscillating an output signal;

15 a filter unit converting an output signal from the crystal oscillator unit into a signal close to an ideal sine wave, and outputting the converted signal; and

 a pulse conversion unit outputting a pulse of a rectangular waveform based on output of said filter unit.

20 7. The synchronous signal generator according to claim 6, wherein

 said filter unit converts the signal such that a level of a specific frequency component in the output signal from said crystal oscillator unit can be relatively higher than levels of other frequency

components, and outputs a resultant signal.

8. The synchronous signal generator according to
claim 7, wherein

5 said filter unit is a band pass filter having an
oscillation frequency of said synchronous signal
generator as a center frequency.

9. The synchronous signal generator according to
10 claim 6, wherein

 said filter unit is equal to said crystal
oscillator unit in frequency-temperature
characteristic.

15 10. The synchronous signal generator according to
 claim 9, wherein

 said filter unit is formed by a crystal filter
equal to said crystal oscillator unit in cutting angle
of crystal piece.

20 11. A synchronous signal generator, comprising:

 a crystal oscillator means for oscillating an
output signal;

25 a filter means for converting an output signal
from the crystal oscillator means into a signal close

to an ideal sine wave, and outputting the converted signal; and

a pulse conversion means for outputting a pulse of a rectangular waveform based on output of said filter means.

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12. A synchronous signal generating method obtaining a synchronous signal from output of crystal oscillator unit oscillating an output signal, comprising:

10 converting an output signal from said crystal oscillator unit into a signal closed to an ideal sine wave; and

converting the converted signal into a pulse signal of a rectangular waveform.

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